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Office Supreme Court, U.S.
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CLERK

85-29

No. _____

IN THE

SUPREME COURT OF THE UNITED STATES

October Term, 1984

EWP CORPORATION and
LA SOCIETE TREFILUNION,
Petitioners,

v.

RELIANCE UNIVERSAL INC., and
EXPOSIAC INDUSTRIES, INC.,
Respondents.

Petition for Writ of Certiorari

Appendix B

Nathaniel R. French
BIEBEL, FRENCH & NAUMAN
2500 Kettering Tower
Dayton, Ohio 45423
(513) 461-4543
Counsel for Petitioners

Of Counsel:
William H. Webb
Webb, Burden, Robinson
& Webb, P.A.
Oliver Building
Pittsburgh, PA 15222-2363
(412) 471-8815

COURT INDEX PRESS, INC. — 215 E. Ninth Street, Cincinnati, Ohio 45202 — (513) 241-1450

PETITION FOR WRIT OF CERTIORARI TO THE
UNITED STATES SUPREME COURT

APPENDIX B

Francois U.S. Patent 3,578,036 .....B1

Patent Update: The Road to Uniformity And Its Potholes, George Whitney B6

United States Patent

[11] 3,578,036

[72] Inventor: Maurice Francois, Saint Dizier, France

[21] Appl. No. 808,252
[22] Filed Mar. 18, 1969
[45] Patented May 11, 1971
[73] Assignee Trefilunion, Paris, France
[32] Priority Mar. 22, 1968
[33] France
[31] 144,908

[54] LATTICE FOR THE REINFORCEMENT OF TUBULAR CONCRETE ELEMENTS HAVING A SOCKET METHOD FOR PRODUCING SAID LATTICE AND THE PRODUCTS OBTAINED

1 Claim, 4 Drawing Figs.

[52] U.S. Cl. 140/107, 140/112
[51] Int. Cl. B21f 27/22
[50] Field of Search 140/71, 107, 112, 29/445, 52/653, 669, 670

[56] References Cited

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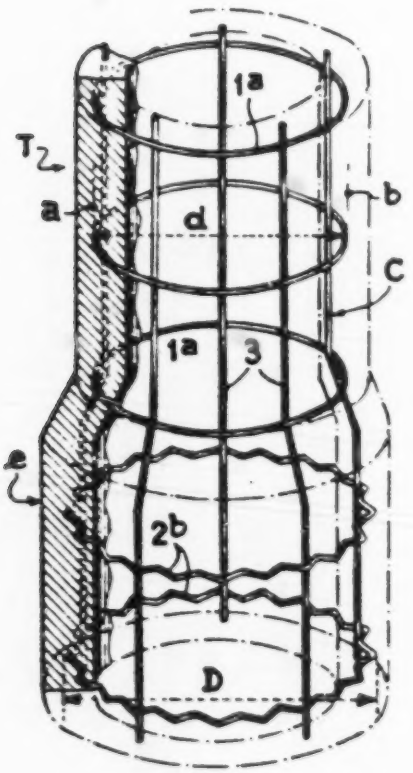
Primary Examiner—Lowell A. Larson
Attorney—J. Delattre-Segui

ABSTRACT: Method for producing a reinforcement having a socket for a reinforced concrete tubular element having a socket. The method comprises forming a prereinforcement from lattice in which some of the warp wires have successive deformed nonrectilinear portions whereas the other warp wires and all the weft wires are rectilinear. The deformed warp wires are bent in the form of welded rings and the rest of the lattice is bent in the form of a cylinder. The part of the prereinforcement intended for the socket part of the tubular element is radially expanded to the desired diameter by at least partially straightening the deformation of the deformed warp wires.



PATENTED MAY 11 1971 3,578,036

FIG.1

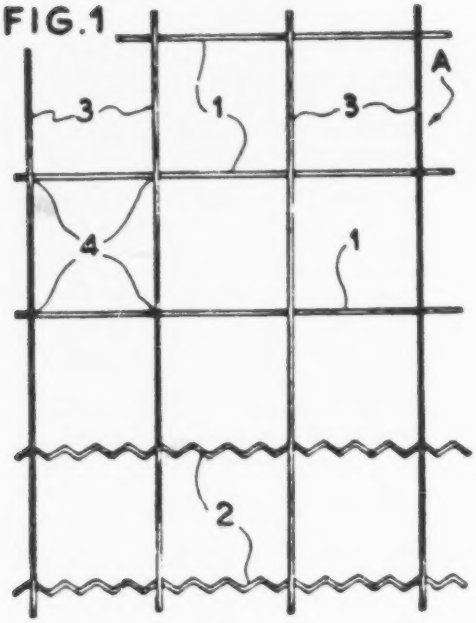


FIG.2

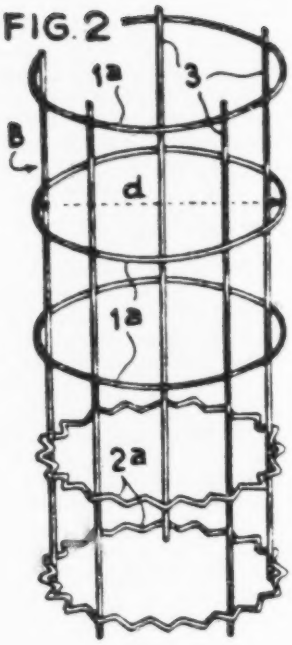


FIG.4

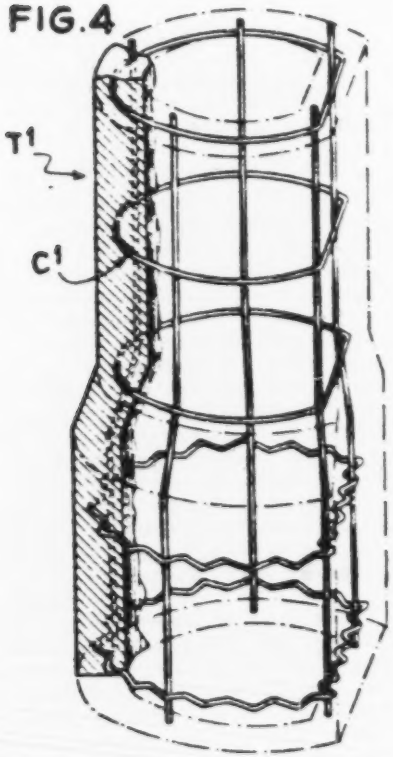
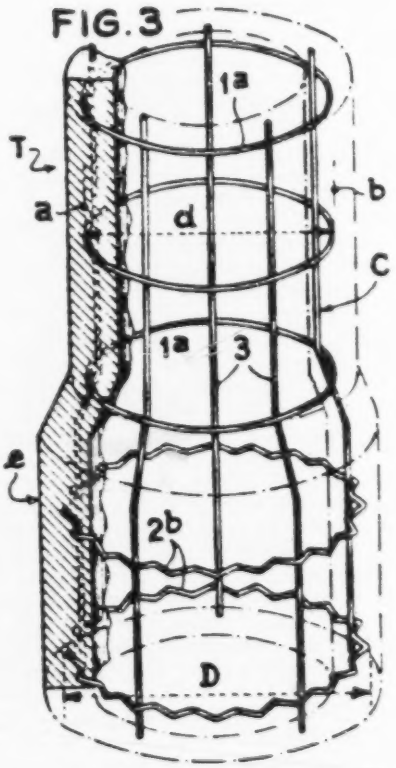


FIG.3



Inventor:
MAURICE FRANCOIS
by J. Delattre Degny, Attorney

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LATTICE FOR THE REINFORCEMENT OF TUBULAR CONCRETE ELEMENTS HAVING A SOCKET METHOD FOR PRODUCING SAID LATTICE AND THE PRODUCTS OBTAINED

The present invention relates to lattices of welded wires for producing reinforcements for concrete tubular elements having a socket and to the production of this lattice and the reinforcements obtained.

It is already known to employ a lattice for reinforcing concrete tubular elements including a socket. However, the cross section of the socket is substantially greater than that of the run or body of the tubular element and the best steels do not have sufficient elongation characteristics to permit a large expansion without fracture. Thus, to produce a reinforcement in one piece, there are at present two known methods.

The first consists in avoiding the reinforcement of the socket, the lattice being limited to the body of the tubular element, however, the socket then has a strength which may be insufficient in some cases.

The second method consists in producing the reinforcement in two parts, namely one part for the run or body of the tubular element and a wider part for the socket, the two parts being interconnected by metal wires, however, this method is relatively long to carry out and sometimes delicate owing to the difficulties of centering the part of the reinforcement intended to be embedded in the socket.

The object of the present invention is to overcome these drawbacks.

The invention provides a lattice of welded metal wires wherein a number of the warp wires have successive deformed nonrectilinear portions, the deformations of said portions being permanent and such that, upon exertion of tensile stress thereon, said portions can be at least partially straightened, whereas the other warp wires and all the weft wires are rectilinear.

Owing to their deformed portions, which may form folds, waves, fractions of a coil or any other sinuosities or convolutions, it is possible to elongate the corresponding warp wires and the lattice can undergo, in the portion pertaining to these wires, an expansion in the direction in which the warp wires extend.

Another object of the invention is to provide a method for producing from the aforementioned lattice a reinforcement having a socket for a reinforced concrete tubular element which has a socket, said method comprising, in a first stage, forming a reinforcement blank or prereinforcement by bending and closing onto themselves, in the form of welded rings, the transverse wires of a section of said lattice, said section being such that the transverse wires corresponding to the socket, and only these wires, have a succession of permanently deformed nonrectilinear portions so that they have an apparent perimeter equal to the perimeter of the nondeformed transverse wires of the rest of the prereinforcement but a real length substantially greater than said perimeter, then, in a second stage, radially expanding the prereinforcement so as to elongate at least partially said nonrectilinear portions of the transverse wires of its socket and impart thereto an apparent perimeter which is substantially greater than that of the rest of the prereinforcement and corresponds to that of the desired socket of the reinforcement.

Another object of the invention is to provide a prereinforcement obtained by the aforementioned first stage, wherein some of the transverse wires have, starting from one of the ends of the reinforcement and on a portion of its length, a succession of permanently deformed portions so that the apparent perimeter of said transverse wires is equal to the perimeter of the other undeformed transverse wires, but a real length substantially greater than said perimeter.

A further object of the invention is to provide a reinforcement having a socket obtained by means of the aforementioned method, said lattice reinforcement having transverse wires bent and closed onto themselves in the form of welded rings and wherein, in the zone of the socket, the transverse wires of the lattice have a trace of partially open deformations.

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Yet another object of the invention is to provide a tubular reinforced concrete element having a socket comprising a lattice reinforcement which extends throughout the length of the body and has in the zone of said socket transverse wires which have a trace of partially open or straightened deformations.

Thus the invention makes it possible to produce, as will be understood, under excellent conditions which are further improved relative to known methods, tubular concrete elements reinforcing them by means of a single-piece reinforcement which extends into the whole of the sockets.

Further features and advantages of the invention will be apparent from the ensuring description with reference to the accompanying drawing.

IN THE DRAWING

FIG. 1 is a diagrammatic view of a plane section of lattice according to the invention.

FIG. 2 is a perspective view of the same section of lattice after having been bent and welded so as to form a closed cylindrical cage constituting THE blank of the reinforcement or prereinforcement.

FIG. 3 is a diagrammatic perspective view of the reinforcement finally obtained embedded in a concrete pipe having a socket, and

FIG. 4 is a diagrammatic perspective view of a modification of the reinforcement for a tubular body having an oval cross section including a flat portion.

Reference will first be had to FIG. 1 which shows a section of an improved lattice according to the invention.

This lattice comprises a series of warp wires 1 and 2 and a series of weft wires 3. The wires of the two series intersect at a right angle and are welded together at the crossing point 4. Whereas the warp wires carrying the reference numeral 1 and the weft wires 3 are rectilinear, the warp wires 2 are deformed in alternately opposite directions so as to have successive nonrectilinear portions, either in the form of corrugations as shown, or in the form of folds, loops or other sinuosities or convolutions located in the plane or outside the plane of the lattice.

The deformed portions can be continuous, as shown, or interrupted by short rectilinear portions.

The shape of the convolutions, corrugations or other deformations of the wires 2 is so arranged that their amplitude corresponds to the width of the electrodes of the welding machine employed for welding the lattice, since the wrap wires and the weft wires are welded at the crossing points.

This shape is also chosen as a function of the total elongation rate corresponding to the necessary expansion.

The same is true as concerns the choice of the steel of the corrugated wires 2 whose elongation characteristic must be considered as a function of the required expansion.

Now, let is be assumed that it is required to construct a reinforcement for a concrete tubular element T having a socket *e* (FIG. 3). There is cut from the lattice according to the invention a section A (FIG. 1) whose dimensions correspond to the those of the reinforcement to be embodied in this pipe or tubular element T. This section can be cut at the site of construction of the pipes from a roll of lattice or in a factory and delivered to the site in the flat condition.

This section has, in the direction of the weft wires, the desired length for the reinforcement, whereas in the direction of the warp wires 1, 2 it has a length equal to πd, in which *d* is the desired diameter of the body of the reinforcement, that is, the part which is not the socket part (FIG. 2).

The section A of lattice is bent and welded in the form of cylindrical blank or prereinforcement B (FIG. 2.). In this prereinforcement B the warp wires 1 and 2 become transverse circular rings 1' and 2' whereas the weft wires 3 remain rectilinear and embody generatrices of the resulting cylindrical prereinforcement B. In this prereinforcement B, the rings 1' and 2' have a diameter *d* roughly corresponding to the mean diameter *ab* of the wall of the body of the concrete pipe T to be obtained.

Note that the rings 2° formed by the corrugated wires 2 have an apparent perimeter *nd* which is equal to the perimeter of the rings 1° formed by the wires 1 but a real length which is substantially greater than this perimeter owing to their convolutions, corrugations or other nonrectilinear portions.

When employing this prereinforcement B benefit is had of the existence of these corrugated portions of wires 2, which constitute a sort of reserve by expansion of the rings 2° and afford larger rings 2' (FIG. 3), the diameter D of the rings 2' corresponding to the mean diameter of the wall of the socket *e* of the pipe and being substantially greater than the initial diameter *d* which corresponds to the diameter of the rings 1° since the socket of a concrete pipe has a cross section which is greater than that of the body of the pipe.

In order to change from the cylindrical prereinforcement B shown in FIG. 2 to the final reinforcement C shown in FIG. 3, the prereinforcement B is mounted on a expanding machine for expanding the rings 2°. This expansion is achieved by means of a known apparatus, such as an expansible mandrel controlled by hydraulic pneumatic or mechanical means and inserted in the rings 2°.

By means of it is apparatus, only the corrugated rings 2° are expanded and undergo both a mechanical circumferential elongation owing to the straightening of the corrugations or other deformations and an intrinsec elongation, that is an elongation in the fibers of the metal. Owing to the "restoration" of the excess length of the corrugations, which were as it were put in "reserve" in the initial lattice, the total elongation of the rings from 2° and 2' can be considerable and in any case substantially greater than the intrinsec possibilities of elongation of uncorrugated wires.

The longitudinal wires 3 are also expanded near their ends in the connection zone 4 between the expanded part and the nonexpanded part. However, this connection zone 4 is of short length so that the natural or intrinsic elongation or the wires 3 is sufficient to permit the deformation.

In this way, the final reinforcement C shown in FIG. 3 is obtained. This reinforcement comprises a number of longitudinal wires 3 embodying the generatrices of the reinforcing cage, a large number of nonexpanded circular rings 1° of uncorrugated wire and, in the zone of the socket, a small number of rings 2' of wire which is still more or less deformed, the corrugations, folds or other convolutions not having completely disappeared upon the expansion.

Finally, in order to obtain the reinforced concrete pipe T, this reinforcement C is placed in a mould into which the concrete is poured. The reinforcement is embodied in the concrete. The pouring can be carried out in a static mould or in a centrifugal casting mould.

Thus, it will be understood that the shape and amplitude of the convolutions, sinuosities, corrugations, folds or other deformations of the wires 2 must be such that the sum of the intrinsic elongation of the wires 2, due to the characteristics of elongation proper to these wires, and the elongation of "restoration" due to the straightening of the deformations, allows an amplitude of expansion of these wires 2 which is sufficient to produce, without fracture, a reinforcement for a socket having a diameter D substantially greater than the diameter *d* of the body of the armature.

In view of the fact that for practical reasons the length of wire put in reserve in the deformations is nonetheless limited, the steel of the wires 2 is selected from a quality having an intrinsic elongation characteristic which is sufficient to obtain the expanded perimeter corresponding to the socket of the pipe T after adding the elongation due to the straightening of the deformations. This steel may be, for example and not exclusively, a SIEMENS-MARTIN steel or an oxygen-blown steel.

Note moreover that although the uncorrugated wires of the rings 1° and of the generatrices 3 may be bright wires, that is to say, wires hardened by drawing, since they are not intended to be elongated and their elongation characteristics before fracture can be low, the wires 2 may be of a steel having higher characteristics of elongation before fracture and preferably but not exclusively, nonaging.

Owing to the initial deformation of the wires 2 in the form of sinuosities, convolutions, corrugations or folds, it is possible to elongate them to a substantially greater extent than would be permitted by the intrinsic elongation characteristics of these wires when uncorrugated. Consequently, it is possible to manufacture in one piece a reinforcement for a concrete pipe having a socket by a large expansion of the part of the prereinforcement B corresponding to the socket zone of the pipe T intended to be reinforced.

Thus, owing to the invention, it is possible to construct a reinforcement in one piece, which is quicker to produce and employ than known reinforcements in two pieces which are interconnected. This one-piece reinforcement can be more easily bent than reinforcements in two pieces in the mould for the concrete element or pipe.

Further, instead of transporting the reinforcements to the place of manufacture of the concrete pipes, in the prefabricated form, which is space-consuming and liable to damage the reinforcements in the course of transport, the simplicity of the method according to the invention enables the reinforcements to be constructed on the site, from rolls or panels of lattices which are easy to transport with the minimum of space consumption.

The numerical examples of the following table show the substantial increase in the possibilities of elongation of the lattice wires, owing to the length of wire which is put in reserve in each corrugations and restored by straightening.

This table shows the results of statistics established from many samples having undergone tensiles stresses under the conditions prescribed in the "Rules for the use of reinforced concrete BA 68."

The samples were plane lattices of steel wires having a diameter of 3.90 mm., the deformed wires had sinusoidal corrugations whose pitch or wavelength was 30 mm. and whose amplitude was of the order of 10 mm.

TABLE

Type of wire	Load producing the elongation	State of the wire	Elongation percent
Ordinary bright mild Martin steel	045	Uncorrugated	4-6
		Corrugated	21-25
Ordinary annealed mild Martin steel	[illegible]	Uncorrugated	24-32
		Corrugated	45-57

NOTE. Elongation increases when the width of the member of the lattice decreases.

As can be seen, the gain in total elongation obtained with bright wire owing to the corrugations is increased by 25 percent in absolute value. Its relative value is considerable since it is multiplied by about 6.

The gain in the elongation due to the corrugations with annealed wire is between 21 and 25 percent in absolute value. It is less in relative value than in the case of the bright wire since the intrinsic elongation characteristics of this wire when uncorrugated are already appreciable.

However, the total elongation is greater for the annealed corrugated wire than for the bright corrugated wire so that it allows a greater expansion than the corrugated bright wire, which corresponds to a greater ratio between the diameter of the socket of the pipe and the diameter of the body of the pipe.

The example described hereinbefore relates to a concrete pipe having a circular section In the embodiment shown in FIG 4, the invention is applied to a pipe T^1 having an oval section and a flat portion The reinforcement C^1 has a corresponding shape This shape is applicable in particular to concrete pipes for drains

The deformations (folds, sinuosities, loops, convolutions or corrugations) can be in the plane of the lattice panel or project from this plane, that is, the deformations can be, in the bent reinforcement cage, in the theoretical surface similar to that of the tubular element and passing through the longitudinal or generatrix wires, or project inwardly or outwardly relative to this theoretical surface and oriented in any way.

Although specific embodiments of the invention have been described, many modifications and changes may be made therein without departing from the scope of the invention as defined in the appended claims

Thus the invention is applicable not only to tubular elements but also to oval, elliptical or prismatic tubular elements, the reinforcement having an oval, elliptical or prismatic shape

Having now described my invention what I claim as new and desire to secure by Letters Patent is

I claim

1. A method for producing a reinforcement having a socket for a reinforced concrete tubular element having a socket, from a lattice having warp wires and weft wires and wherein a number of the warp wires have successive deformed nonrectilinear portions, the deformations of said portions being permanent and such that, upon exertion of tensile stress thereon, said portions can be at least partially straightened, whereas the other warp wires and all the weft wires are rectilinear, said method comprising, in a first stage, forming a prereinforcement by bending and closing onto themselves, in the form of welded rings, the transverse wires of a section of said lattice, said section being such that the transverse wires corresponding to the socket, and only these wires, have a succession of permanently deformed nonrectilinear portions so that they have an apparent perimeter equal to the perimeter of the nondeformed transverse wires of the rest of the prereinforcement but a real length substantially greater than said perimeter, then, in a second stage, radially expanding the prereinforcement so as to elongate at least partially said nonrectilinear portions of the transverse wires of its socket and impart thereto an apparent perimeter which is substantially greater than that of the rest of the prereinforcement and corresponds to that of the desired socket of the reinforcement

PATENT UPDATE: THE ROAD TO UNIFORMITY AND ITS POTHOLES

George Whitney
Brumbaugh, Graves, Donohue & Raymond
New York, NY

Assisted by Brendan J. O'Rourke, Esq.
Brumbaugh, Graves, Donohue & Raymond

First let us look to the cases addressing Section 103. In the seven years prior to the C.A.F.C., nine of the eleven regional courts of appeals addressed Section 103 some 41 times. In 36 of those cases, the district court cited the Supreme Court decision in Graham v. John Deere, 383 U.S. 1 (1966). In only a few of those cases did the decisions also cite and recognize as controlling the Supreme Court's decisions in Anderson's Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57 (1969), and Sakraida v. Ag Pro Inc., 423 U.S. 273 (1976).

Since October 1, 1982 (relying on an excellent statistical analysis by Donald R. Dunner in the April 1, 1985 -- Practicing Before The Court of Appeals For The Federal Circuit program that he chaired for the Practising Law Institute in New York City, which included cases decided through January 18, 1985), the Federal Circuit has addressed Section 103 -- 45 times in the 135 cases considered which arose in the district courts. In ten cases, the issue of Section 103 had been before a jury. Section 103 was addressed

in 2 of the 4 Claims Court cases it has decided, in 3 of the 9 I.T.C. cases, and in 114 of the 149 PTO cases.

Fraud and inequitable conduct have been considered 12 times.

Section 102 was considered in 22 out of 135 district court cases, 1 out of 4 Claims Court cases, 2 out of 9 I.T.C. cases, and 5 out of 149 PTO cases.

Section 112 was addressed in 10 district court cases, once in the Claims Court cases, once in the I.T.C. cases, and 12 times in the PTO cases.

The issues of infringement were addressed in 52 out of the 135 district court cases, twice in Claims Court cases, and five times in the 9 I.T.C. cases.

Increased damages has been addressed 7 times, frivolous appeals 10 times, attorneys' fees 21 times, and jury trials 15 times.

Bearing in mind the tremendous effort that has been made by the members of the court in these highly expository written opinions -- irrespective of what one might say about the inherent problem of obiter dictum, we do have a highly comprehensive controlling body of law on which to base our practice.

I find concern in the fact that the Federal Circuit remanded in only 3 of 135 district court appeals and in only 2 of 149 PTO appeals. Since the Federal Circuit reversed

either in whole or in part 42 times (36%) in the district court cases and 30 times (20%) in the PTO cases, I respectfully suggest that they have gone a long way to create the perception that in the zeal to be result oriented, they have arrogated the roles of trial judge and jury. Such perception, in contrast to the intent to reduce litigation by creating uniformity and predictability, may be an incentive to litigate -- not to settle -- prior to testing the theories of one's case before the Federal Circuit.

CAFC: THE SUPREME COURT OF PATENT LAW

As a result-oriented court, the CAFC has set up vehicles within patent law which it can use to obviate the traditional standards of review in reversing lower court decisions. It appears that not only have the result-oriented vehicles been established, they have been used in several recent decisions to circumvent the factual findings of the trial courts. Before highlighting certain key decisions in which the CAFC has used the artificial devices, a more detailed analysis of exactly what the "vehicles" are and how they work is necessary.

Perhaps the most important issue which the CAFC has seized upon in giving itself the latitude to decide each case is whether obviousness is a question of law or a question of fact. While the CAFC has settled the issue in a legal sense, its subsequent application of its decisions on the issue has given patent practitioners little guidance on how the CAFC will decide the obviousness question.

More specifically, the CAFC has decided that, while the underlying considerations regarding the issue of obviousness are factual determinations governed by the clearly erroneous standard of Rule 52(a) of the Federal Rules of Civil Procedure, the ultimate determination of obviousness is a legal issue not subject to the clearly erroneous standard. SSIH Equipment, S.A. v. United States International Trade Commission, 713 F.2d 746, 218 U.S.P.Q. 678 (Fed. Cir. 1983); Atlas Powder Co. v. E.I. Du Pont de Nemours & Co., 224 U.S.P.Q. 409 (Fed. Cir. 1984).

This approach has unquestionably become the law in the CAFC and was followed as recently as February 1985 in Fromson v. Advance Offset Plate, Inc., Appeal Nos. 84-1542/1553, slip op. (Fed. Cir. February 21, 1985).

The CAFC's statement of the law is uniform; however, application of the law is not. The CAFC, by making the dichotomy of law versus fact, has established an approach whereby it can reverse a trial court's findings on obviousness without having to hold a single finding of fact clearly erroneous. The CAFC can agree with the factual findings of the trial court all the way down the line but then conclude that the trial court's legal conclusion on obviousness was plain error.

The latitude the Court has given itself is a particularly dangerous tool with which the CAFC is, in part, constructing the foundation of uniformity, and brings into question whether the CAFC is limiting itself to its role as an appellate court.

In EWP Corp. v. Reliance Universal Inc., Appeal No. 84-711, slip op. (Fed. Cir. February 21, 1985), the CAFC used the latitude it has granted itself in determining obviousness, and, in essence, supplanted the trial court's findings of fact with its own. It cloaked its findings as legal conclusions by first stating that, "[w]hether the single claim of the Francois patent in suit is valid under 35 U.S.C. 103 is a question of law and that question is freely reviewable

by this court." EWP Corp., supra, slip op. at p. 12. The Court has indicated in the first sentence of its opinion that the vehicle it will use to arrive at its own conclusion is the question of law versus question of fact distinction.

Unfortunately for the plaintiff, the questions of fact in EWP Corp. were "freely reviewed." This point is illustrated by the Court's language when it stated the following:

> Having corsidered the careful review of the prior art by the district court and the briefs in this court, we set forth below what appears to us to be the prior art most relevant to the method claimed in the patent in suit.

EWP Corp., supra, slip op. at 6 (emphasis added). It is the role of the trial court to determine what the most relevant prior art is, yet the CAFC, in essence, replaced the trial court's findings with its own. Moreover, the language used by the CAFC draws the reader's attention to what the Court is doing: "[t]he other most relevant prior art, in our view, is ...." EWP Corp., supra, slip op. at p. 8 (emphasis added).

The Court's analysis of the prior art comes dangerously close to a de novo review of the factual issues.

In rejecting the trial court's analysis of the "secondary considerations," the CAFC replaced the trial court's findings with its own speculation finding that "it is not unusual to see astute businessmen capitalize on it [the patent in issue] by erecting a temporarily successful licensing program thereon." EWP Corp., supra, at p. 17.

The panel of judges in EWP Corp. consisted of Judges Rich, Davis, and Baldwin. In his concurring opinion, Judge Davis attempts to clarify exactly why the secondary considerations, on which the district court relied, would not tip the scale in the patentee's favor. Again, one finds the CAFC guilty of replacing the district court's findings with its own, absent a ruling that the district court was clearly erroneous. Judge Davis states that, had the teachings of the prior art (foreign patents) been widely circulated, "I judge that the invention at issue would have been made very much earlier and would have attained like success." EWP Corp., supra, slip op. (Davis, Circuit Judge, concurring at p. 2 of the concurrence) (emphasis added).

Not only has Judge Davis made his own factual finding, the finding is based on mere speculation.

The CAFC's reputation since its inception has been "pro-patent," and its reversal of the district court's (non-jury) holding of nonobviousness, therefore, is all the more curious.

A second legal issue upon which the CAFC has seized in order to decide the question of obviousness as it sees fit is the so-called "secondary considerations" question -- i.e., how much weight must a trial court give to secondary considerations in determining the question of obviousness. Before illustrating how much latitude the CAFC has granted itself in reviewing secondary considerations, a review of the CAFC

decisions and the evolution of the factors under Graham v. John Deere is fundamental to an understanding of how the CAFC presently approaches the issue.

Clearly, under Graham, the obviousness question rested on factual determinations as to (1) the scope and content of the prior art, (2) the differences between the claimed invention and the prior art, and (3) the level of ordinary skill on the art. Graham v. John Deere Co., 383 U.S. 1, at 17, 148 U.S.P.Q. 459, at 466-467 (1966). Although the Supreme Court did discuss secondary considerations, the secondary considerations were viewed differently than the enumerated three-pronged analysis.

Before the CAFC tackled the issue, certain courts viewed secondary considerations as evidence which would tip the balance in favor of patentability in close cases. See, e.g., American Seating Co. v. National Seating Co., 568 F.2d 611, 199 U.S.P.Q. 257 (6th Cir. 1978); Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. 231 (E.D. Mich. 1982). However, under the CAFC decisions, it is clear that secondary considerations are to be reviewed and considered in all cases, not merely in the close cases.

In Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 U.S.P.Q. 871 (Fed. Cir. 1983), the CAFC ruled that secondary considerations should always be considered by the trial court, reasoning further that "[i]ndeed, evidence of secondary considerations may often be the most probative and

cogent evidence in the record." Stratoflex, Inc., supra, 218 U.S.P.Q. at 879.

While the CAFC concluded that it was error for the district court to exclude such evidence from consideration, the CAFC did not remand the case for further proceedings. Instead, the CAFC decided that since such evidence (although not considered by the district court) was in the record, the interests of judicial economy dictated its consideration and evaluation by the CAFC on the appeal.

Under its earlier decisions, therefore, it appears that while the CAFC required an analysis of the secondary considerations, failure by the district court to consider such evidence would not compel the CAFC to reverse or vacate the district court decision.

Four months after the CAFC's decision in Stratoflex, the CAFC reversed a holding of invalidity based upon what it termed "objective evidence." W.L. Gore & Associates v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983). The reference to "objective evidence" as opposed to "secondary considerations" can be seen as an attempt by the CAFC to give such evidence primary significance, since the term "secondary" was viewed by some courts to mean "of less importance."

Clearly, under the CAFC decisions, "secondary considerations" (commercial success, fulfillment of long felt need, etc.) were beginning to take on primary significance.

Under the present CAFC decisions, the Court has been careful to use the term "objective evidence." Furthermore, the present cases make clear the notion that objective evidence should be viewed as a fourth factor under Graham. Litton Industrial Products, Inc. v. Solid State Systems Corp., Appeal Nos. 84-818/858, slip op. (Fed. Cir. Feb. 29, 1985). In Litton, the Court lists objective evidence as "(4) other ('secondary') considerations, which may serve as indicia of unobviousness," citing Graham v. John Deere Co. The Court's peculiar treatment of the word "secondary" suggests, again, that it means something other than its usual meaning. The court defines "secondary " :o mean "other" when it stated, "As to other considerations ...." Litton, supra, slip op. at 14.

Now that the CAFC has given objective evidence primary consideration, it can use this factor to decide conclusively on the issue of obviousness or it can simply find that the objective evidence does not overcome a strong showing of obviousness.

As explored above, the CAFC has decided that objective evidence can constitute the most probative and compelling evidence on the issue of obviousness. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 U.S.P.Q. 871 (Fed. Cir. 1983); W.L. Gore Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983).

The latitude which the CAFC has granted itself under the guise of objective evidence is apparent upon an examination of its recent decisions. At one end of the spectrum is the Court's decision in Simmons Fastener Corp. v. Illinois Tool Works, Inc., 739 F.2d 1573, 222 U.S.P.Q. 744 (Fed. Cir. 1984). It is clear under Simmons that objective evidence of nonobviousness is not only a factor which must be considered, such evidence may be controlling even when the teachings of the prior art prima facie suggest the claimed invention. Simmons Fastener Corp., supra, 222 U.S.P.Q. at 747.

Such was the case in Simmons. The CAFC agreed with the district court that the teachings of the prior art suggested the invention in question, yet the CAFC reversed the district court's holding of obviousness, based upon the district court's failure to consider the evidence of commercial success. However, the CAFC did not state with any certainty exactly what objective evidence upon which it was basing its reversal.

This case is curious because it cites Stratoflex and W.L. Gore. While relying on Stratoflex for its legal propositions, Simmons is in direct conflict with Stratoflex in the CAFC's application of the legal standards.

In Stratoflex, the CAFC found that the district court erred in not considering the secondary considerations and then made its own findings with respect to the objective

evidence. Ultimately, the CAFC affirmed the district court's finding of obviousness even though the district court erred in reviewing only three of the Graham factors.

In Simmons, the CAFC reversed the district court's holding of obviousness, based upon the trial court's failure to consider the objective evidence. Oddly enough, the CAFC did not refer specifically to the objective evidence which it felt established nonobviousness. The Simmons decision is even more puzzling since the CAFC agreeed with the district court that the prior art suggested the invention.

These two cases illustrate that the CAFC can use the fourth factor of the obviousness question to decide each case as it sees fit.

Whereas the objective evidence in Simmons overcame the fact that the prior art suggested the invention, in EWP Corp. v. Reliance Universal Inc., Appeal No. 84-711, slip op. (Fed. Cir. Feb. 21, 1985), the CAFC brushed aside strong evidence of commercial success in reversing the district court's holding of nonobviousness. The trial court in EWP Corp., 221 U.S.P.Q. 542 (S.D. Ohio 1983), found that virtually every manufacturer in competition with the plaintiff had sought and obtained a license in the claimed invention. Further, the district court found that the invention had filled a long-felt and serious need in the relevant industry and that it had an immediate and extensive impact on the industry.

The CAFC in EWP Corp. dismissed the secondary considerations by describing the licensing agreements (every competitor in the United States except defendant obtained one) as "a temporarily successful licensing program." EWP Corp., supra, slip op. at 17. In so stating, the CAFC has made its own factual finding cloaked in the question of law versus question of fact distinction.

So far we have seen two separate but closely related problems on the issue of obviousness and two separate but related vehicles with which the CAFC can use to arrive at a desired result.

It is becoming increasingly clear that the result the Court seeks is not necessarily a "pro-patent" approach. Rather, it appears that the Court is attempting to give itself the latitude to decide cases whichever way it feels most strongly, regardless of the established standards of review which have traditionally guided the federal circuit courts.

A third vehicle used by the CAFC in deciding cases according to its own preferences rests on the presumption of validity. While the presumption of validity, itself, does not change under the Court's decisions, the CAFC's application of the presumption has had varying importance depending upon its ultimate holding on obviousness.

The CAFC has made clear that the presumption of validity under 35 U.S.C. § 282 can neither be strengthened nor destroyed. It is, instead, a procedural device placing

the burden of proof upon the party asserting invalidity. D.L. Auld Co. v. Chroma Graphics, 714 F.2d 1144, 219 U.S.P.Q. 13 (Fed. Cir. 1983). The Court has focused on the burden of overcoming the presumption of validity, and not the presumption itself.

While the presumption is unchanged, the burden of overcoming the presumption is "less easily carried when the evidence relied upon consists only of the prior art considered by the examiner." Hughes Aircraft Co. v. United States, 717 F.2d 1351, 219 U.S.P.Q. 473 (Fed. Cir. 1983). Conversely, the burden is more likely to be carried when prior art more relevant than that considered by the examiner is introduced. SSIH Equipment S.A. v. United States International Trade Commission, 718 F.2d 365, 218 U.S.P.Q. 678 (Fed. Cir. 1983).

In EWP Corp. v. Reliance Universal Inc., Appeal No. 84-711, slip op. (Feb. 21, 1985), in reversing the trial court's holding of nonobviousness, the CAFC never resolved the question on the presumption of validity. The CAFC did not discuss whether the appellant had proven invalidity by clear and convincing evidence.

The CAFC, in determining validity, therefore, can either (1) stress that the burden of overcoming the presumption is more easily carried since more relevant prior art has been brought to the court's attention, (2) stress that the burden is less easily carried since the examiner has made his

determination in light of the same prior art, or (3) remain silent as to the presumption and the standard of proof.

One issue which was, until recently, in apparent conflict due to the differing views of the circuit judges was whether the § 282 presumption of validity has any bearing in a reexamination proceeding. In In re Etter, Appeal No. 84-1213, slip op. (Fed. Cir. Feb. 27, 1985), the question was resolved by the Federal Circuit sitting in banc. The CAFC decided that the § 282 presumption is not applicable in reexamination proceedings. The Court reasoned that reexamination permits petitions to the Patent Office based upon new information about preexisting technology which may have escaped review at the time of the initial examination. In re Etter, supra, slip op. at 8.

In concurring, Judge Nies, joined by Judges Smith and Bissell, raised persuasive arguments that matter previously received by the Patent Office in its original determination should carry the statutory presumption of validity under § 282. She argued that while reexamination is technically an ex parte proceeding, it is, in many cases, a continuation of inter partes proceedings. Judge Nies further argued that the majority's holding puts parties, assserting invalidity in civil cases, in a better position by removing the § 282 presumption, where the civil action is stayed pending the outcome of a petition for reexamination.

It seems that no matter how the district court has approached a particular issue, the CAFC has the latitude to resolve the issue of its own accord. We saw in EWP Corp., for example, that the CAFC reversed the district court's "thorough analysis" on the issue of obviousness without finding any of the underlying factual determinations clearly erroneous. The district court applied the correct standards but was reversed as a matter of law.

In contrast, the CAFC affirmed the district court's finding of obviousness even where the district court applied the "genius" inquiry no longer viable under Graham v. John Deere Co. Vandenberg v. Dairy Equipment Co., 224 U.S.P.Q. 195 (Fed. Cir. 1984). The Court brushed aside the improper use of the "genius" standard by finding, "[h]owever, we do not believe that this unfortunate lapse into a bygone era tainted the court's decision." Vandenberg, supra, 224 U.S.P.Q. at 197. If a "genius" inquiry does not taint a court's determination on the issue of obviousness, why did the Supreme Court reject the test in Graham v. John Deere Co.? One must expect that, had the CAFC disagreed with the district court's ultimate conclusions, the "unfortunate lapse into a bygone era" would have been elevated to the status of "reversible error."

Perhaps one reason why the CAFC has applied apparently uniform standards differently is the fact that, while the CAFC is only one court, it is made up of many different

panels. It functions as would any other circuit. It is prone, therefore, to conflicting decisions just as other circuits are prone to internal disagreement.

Yet, since, at present, the CAFC functions as the final arbitor of patent disputes, the scenario is even more complex. Patent practitioners are faced with analyzing final decisions written by numerous different panels. To illustrate the problem, picture the United States Supreme Court handing down decisions based upon the input of a three-member panel. The assignment of the case to a certain panel could well determine the outcome of the case before it is even decided. For example, a criminal defendant asserting violations of his constitutional rights would much prefer a three-member panel of Marshall, Brennan, and Blackman to a panel consisting of Burger, Powell, and Rehnquist.

The danger facing patent practitioners is that the CAFC has taken on the role as the final arbitor, yet the panel of judges is different in nearly every case. While the Supreme Court has certainly had conflicting opinions, each decision specifically shows whether the Court is united, sharply divided, or somewhere in between the two. The weight of their authority is measurable.

Such is not the case with the CAFC, yet it has been the final word in patent cases since its inception in October 1982. The longer the Supreme Court waits to review a patent case, the greater the impact of the CAFC line of cases be-

comes. If the Supreme Court affirms a CAFC decision, the CAFC's power to decide cases whichever way it wants will be greatly increased. In order to reverse a holding of the CAFC, the Supreme Court is faced with the prospect of having to overrule, in effect, the CAFC's approach to a long line of patent decisions.